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(54) **ULTRASONIC DEVICE, ULTRASONIC PROBE, ELECTRONIC EQUIPMENT, AND ULTRASONIC IMAGING APPARATUS**

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See application file for complete search history.

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(57) **ABSTRACT**

Provided is an ultrasonic device including: an ultrasonic element array substrate having a plurality of ultrasonic elements that each include a piezoelectric body; an acoustic lens secured via an acoustic matching layer to a surface, formed with the ultrasonic elements, of the ultrasonic element array substrate; and a support member secured to a surface, opposite to the surface formed with the ultrasonic elements, of the ultrasonic element array substrate, wherein the support member is formed to have a larger area, in plan view in the thickness direction of the ultrasonic element array substrate, and a higher bending stiffness than the ultrasonic element array substrate, and the acoustic lens is formed to have a lower bending stiffness than the ultrasonic element array substrate. The above-described ultrasonic device further includes an acoustic matching layer filled between the ultrasonic element array substrate and the acoustic lens.

20 Claims, 10 Drawing Sheets